NOTES

NAMING A SOUTHWESTERN MALAXIS (ORCHIDACEAE)

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Recently, Coleman (1997) brought to my attention the fact that Watson (1883) had described a specimen collected in Arizona by the Lemmons, naming it *Microstylis purpurea*. Ridley (1888) revised *Microstylis* and *Malaxis*. Since Lindley (1849) had used the specific epithet *purpurea* to describe a *Microstylis* from Ceylon and Java, Ridley renamed the taxon *Microstylis porphyrea*. In this revision, he rejected the idea that the taxon was the same as *M. ehrenbergii*. Ridley's comment was "*M. porphyrea* has no distinct fovea; the lip is concave at the base but not saccate." This latter refers to Reichenbach's (1849) description of the lip of *M. ehrenbergii* as "gibbere acuto in medio parte basilari," i.e. acutely gibbous in the middle basal part. Kuntze (1891) placed all *Microstylis* species under *Malaxis*, so the taxon became *Malaxis porphyrea* (Ridl.) Kuntze. In their consideration of *Malaxis* nomenclature, Ames and Schweinfurth (1935) decided that *M. porphyrea* was synonymous with *M. ehrenbergii*, and subsequent authors have followed their lead (e.g., Correll 1950; Luer 1975 et al.).

I have examined the holotype of *M. porphyrea* from the Gray Herbarium. It has papillate floral segments and narrowly sagittate lip which easily differentiate it from *M. ehrenbergii* with glabrous floral segments and a broadly triangular-hastate lip. The species should be listed as follows:

Malaxis porphyrea (Ridley) Kuntze., Rev. Gen. Pl. 2:673. 1891. Microstylis porphyrea Ridl., J. Linn. Soc., Bot. 24:320. 1888. Microstylis purpurea S. Watson, Proc. Amer. Acad. Arts 18:195. 1883, non Microstylis purpurea Lindl. Type: U.S.A. ARIZONA. Cochise Co.: Tanner's Canyon, Hyachuca Mts., Jul 1882, J.G. & S.P. Lemmon 2881 (HOLOTYPE: GH).

There is a difference that appears in Ridley's and Reichenbach's descriptions that has not been considered in previous justifications for separation of the two species. Ridley states the stem to be "superne laxe racemosus," i.e., loosely racemose above. Reichenbach, in contrast, says, "racemus plurimiflorus," i.e., raceme very many flowered. This difference is readily seen in Figures 1 and 2, where each dorsal sepal is about 2 mm long. The ranges of the two do not overlap. The southernmost sites of *M. porphyrea* are probably in northern durango and Sonora. The northernmost site of *M. ehrenbergii* is in southern Hidalgo. The gap between is about

1200 km.

ACKNOWLEDGMENTS

I am grateful to the Curator of the Gray Herbarium for the expeditious loan of a holotype specimen and thank all the friends and colleagues who have provided comments and suggestions.

SIDA 17(3): 637. 1997

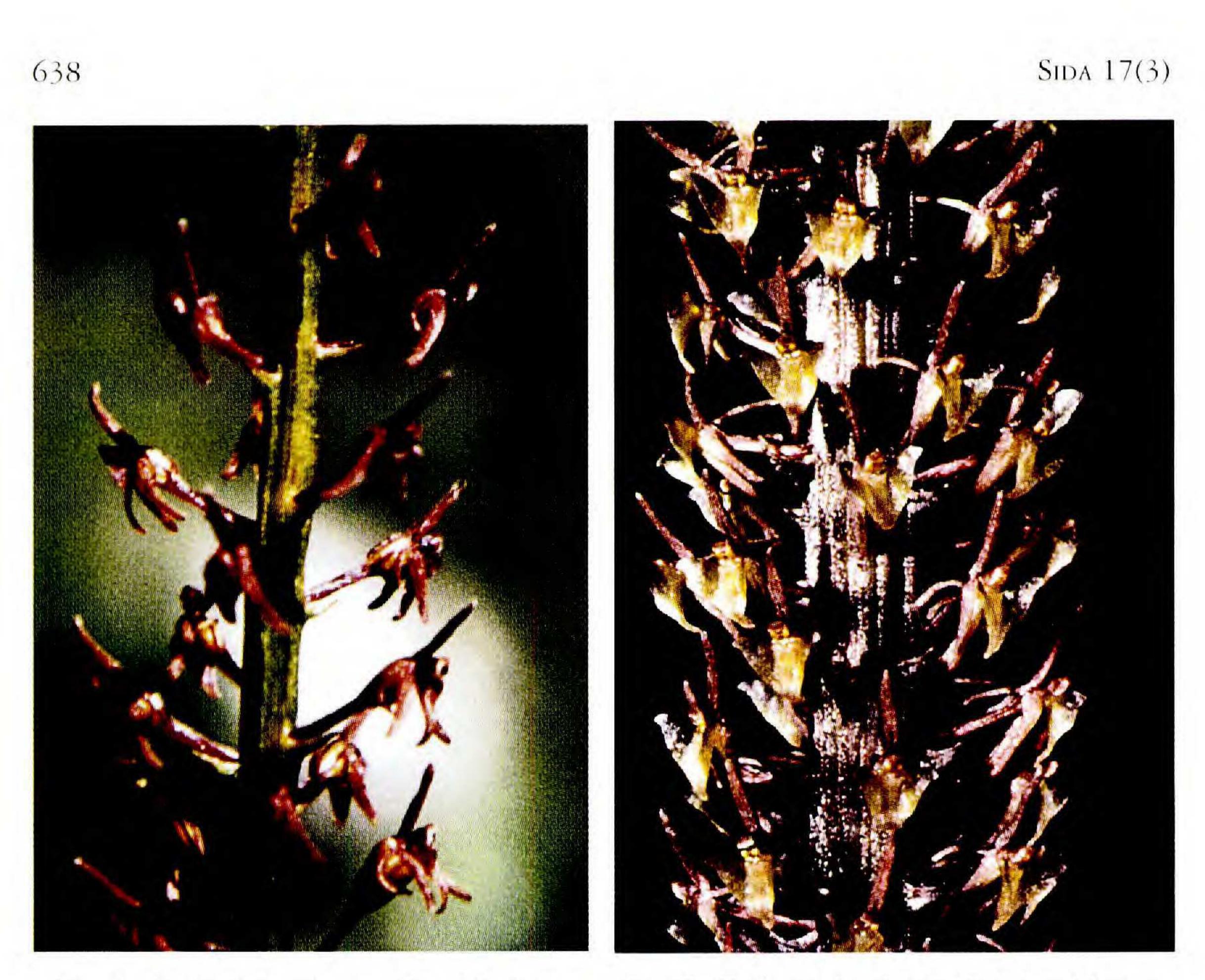


FIG. 1. Malaxis porphyrea. New Mexico. Photo by T.K. Todsen.

Fig. 2. Malaxis ehrenbergii. Oaxaca, Mexico. Photo by E.W. Greenwood.

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REFERENCES

- AMES, O. and C. SCHWEINFURTH. 1935. Nomenclatorial studies in Malaxis and Spiranthes. Bot. Mus. Leafl. 3:116.
- COLEMAN, R. 1997. Personal communication.
- CORRELL, D. 1950. Native orchids of North America. Chronica Botanica.
- KUNTZE, O. 1891. Revis. Gen. Pl. 2:673.
- LINDLEY, J. 1849. Microstylis purpurea sp. nov. Gen. et Sp. Orch. 20.
- LUER, C. 1975. The native orchids of the United States and Canada. New York Botanical Garden.
- REICHENBACH, H. 1849. Microstylis ehrenbergii sp. nov. Linnaea 22:835.
- RIDLEY, H.N. 1888. A revision of the genera Microstylis and Malaxis. J. Linn. Soc. Bot.

24:320.

WATSON, S. 1883. Description of some new western species. Proc. Amer. Acad. Arts 18:195.

SIDA 17(3): 638. 1997